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Rhubarb Culture

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Rhubarb has been a popular herbaceous perennial crop for years. Many backyard gardeners maintain a few clumps for home uses, and in recent years the popularity of the quick-frozen product has given rhubarb a potential for processing. Forcing rhubarb roots in the winter also extends the season of this crop and is becoming a popular practice.

SOIL

Rhubarb is adaptable climatically to most areas in Canada where other horticultural crops are being grown. It grows on any well drained soil, but does best on a deep sandy loam. Heavier soils may be satisfactory if the texture can be improved by the addition of farm manure or peat. For the early spring crop lighter soils warm up more quickly, especially in locations with southern exposures.

The soil should be free from perennial weeds, especially couch or quack grass. You may have to cultivate several times before planting, or use a chemical treatment recommended by weed specialists from the federal or provincial Department of Agriculture.

ROOTS

Because rhubarb seed does not produce plants that are true to type, root sections from established plants must be used. Many cultivars are available for selection, but one of the red-stalked kinds, although not as productive as green-stalked cultivars, makes the best product. Valentine, Ruby, Sunrise, and Macdonald are all acceptable cultivars.

If you are starting a few clumps in the garden, it is best to buy roots of a known cultivar from a nursery. If, however, you plan to establish a large planting and are able to obtain good-sized healthy plants, you can use these as stock for propagation. Dig them up in the early spring, as soon as the frost is out of the ground, or in the fall after the leaves have matured or dropped off. Cut the crowns in sections with

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one or two buds, or eyes, on each portion of root. Large vigorous crowns of some cultivars may provide as many as 20 sections suitable for planting. You can dig up the plants grown from them after 2 or 3 years and divide the crowns again.

PLANTING

Set the crowns in holes dug just deep enough to receive the roots but not so deep that the tips of the buds will be covered with soil. Deep-set crowns often lack vigor and produce long spindly leaf stalks. Good fertile soil should be firmly filled in around the roots, up to the bud tips. If you are setting a large planting, you can use a plow to open the furrows. Spacing should be 1 m between plants, in rows spaced 1.5 m apart.

FERTILIZING AND CARE

Rhubarb grows well in a fertile, slightly acid soil (pH 5.0–6.0) well supplied with moisture.

When you prepare the ground, the recommended treatment is manure at a rate of 40 tonnes/ha, plus 8–16–8 fertilizer or its equivalent at 1000 kg/ha. Mix thoroughly with the soil. Subsequent annual fertilizer treatments that would be beneficial are a fall application of manure, if available, or an early spring application of 8–16–8 or equivalent fertilizer at 1000 kg/ha. If heavy harvesting has been carried out, it may also be desirable to side-dress the plants in June with nitrogen as ammonium nitrate or urea at 50 kg/ha.

In early spring, cultivate between the rows to mix the manure and fertilizer with the soil and to eliminate any perennial weeds. Cultivate during the growing season to keep weeds in check, but take care to avoid injuring the crowns and fleshy roots.

Seed stalks should be removed as they appear, because both quality and yields are reduced if they are allowed to develop. If soil moisture levels are low in the late spring the crop may benefit from irrigation.

CROPPING

For good crown development no stalks should be harvested the first year and only a few during the second year, over a 2-week period. In the following years the harvest season may extend to 8 weeks if stalk size continues to be satisfactory. No more than two-thirds of the larger stalks should be removed from any one plant at one time. A planting that has received good care should remain productive for many years.

Harvesting is best done by hand-pulling rather than by cutting. A sideways or twisting pull severs the stalk at the crown. Prepare the stalks by removing the leaf blades, which contain oxalic acid, a poison.

DISEASES AND INSECTS

On well drained fertile soils, you should have little trouble from disease. However, crown gall sometimes attacks the crowns and kills the plants. Diseased roots should be removed and destroyed and the area should not be replanted.

In weed-free plantings insects rarely attack rhubarb. However, the rhubarb curculio and potato stem borer are pests that may occasionally appear. If control measures become necessary, advice may be obtained from the federal or provincial Department of Agriculture.

FORCING

Forcing rhubarb for market or for home use during winter is rewarding and provides a welcome treat for the family.

Most cultivars can be forced, but the large green-stalked kinds such as Victoria or Sutton's Seedless are generally the more productive. They produce attractive pink stalks when forced. Red cultivars also produce attractive red stalks but yields may be lower.

The roots for forcing must be healthy and large, so select them from plants that you have avoided using for summer harvests. These are usually the plants that are 2 or 3 years old. Dig the roots before the ground freezes in the fall and take as much soil as possible with them. Leave them in the field until the ground freezes, or to prevent drying out pile them together and cover them with straw. The rest period and slight freezing are important because they help to induce rapid forcing. Severe freezing can be injurious.

It is best to have a frost-proof cellar or a cheaply constructed forcing house with an earth floor where the temperature can be maintained at 10-15°C. The roots can be placed on the ground and covered with moist sand, soil, or peat. Light should be excluded because in darkness leaf growth is slight and the stalks develop good color and quality. Thorough, regular waterings are necessary to produce the best yields, although a better-quality product is obtained if watering is not excessive. Good ventilation that allows the tops to dry off reduces the humidity and prevents botrytis rot (gray mold).

About 4 weeks after providing these growth conditions the first stalks will be ready for harvest, and the plants should continue to produce for 3-4 weeks. Under favorable conditions, large healthy roots can produce 3-4 kg of stalks. If continuous production is desired, new beds should be started at intervals of 2-4 weeks. The roots are usually discarded after forcing.

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